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Part Number: [0878321010](#)
Status: **Active**
Overview: [milligrid](#)
Description: 2.00mm (.079") Pitch Milli-Grid™ Header, Surface Mount, Vertical, Shrouded, Lead-free, 10 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Locking Window, without Cap, PCB Locator, Tube

Documents:
[3D Model](#) [Product Specification PS-87831-027 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
UL E29179

General

Product Family PCB Headers
Series [87832](#)
Application Wire-to-Board
Comments Contact Molex for application in automotive industry
Overview [milligrid](#)
Product Name Milli-Grid™

Physical

Breakaway No
Circuits (Loaded) 10
Circuits (maximum) 10
Color - Resin Black
First Mate / Last Break No
Flammability 94V-0
Glow-Wire Compliant No
Guide to Mating Part No
Keying to Mating Part Yes
Lock to Mating Part Yes
Material - Metal Phosphor Bronze
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin Nylon
Number of Rows 2
Orientation Vertical
PCB Locator Yes
PCB Retention None
Packaging Type Tube
Pitch - Mating Interface (in) 0.079 In
Pitch - Mating Interface (mm) 2.00 mm
Pitch - Term. Interface (in) 0.079 In
Pitch - Term. Interface (mm) 2.00 mm
Plating min: Mating (µin) 15
Plating min: Mating (µm) 0.38
Plating min: Termination (µin) 75
Plating min: Termination (µm) 1.88
Polarized to Mating Part Side Slots (2)
Polarized to PCB No
Shrouded Fully
Stackable No
Temperature Range - Operating -55°C to +105°C

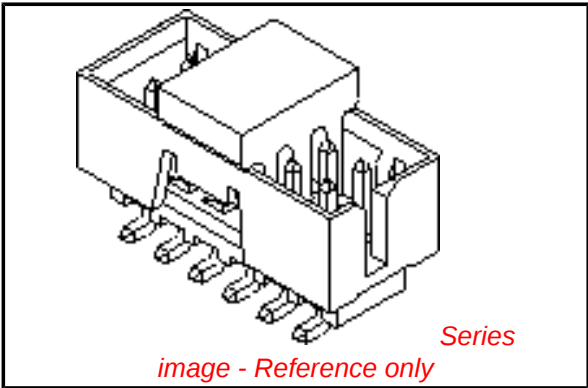


image - Reference only

EU RoHS
ELV and RoHS
Compliant
REACH SVHC
Contains SVHC: No
Halogen-Free
Status

China RoHS



Need more information on product environmental compliance?

Email productcompliance@molex.com
For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

Search Parts in this Series
[87832Series](#)

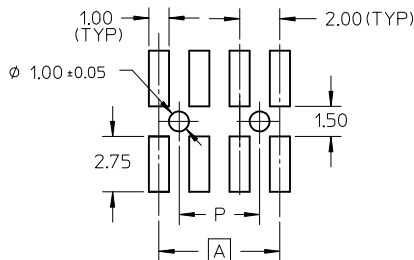
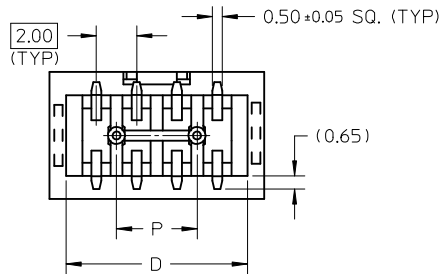
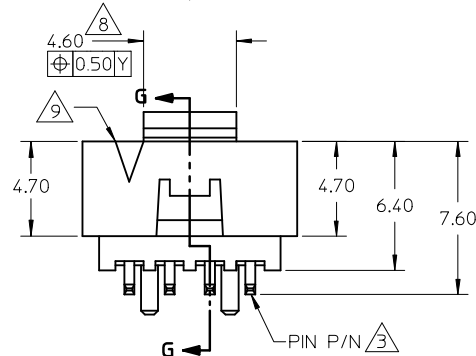
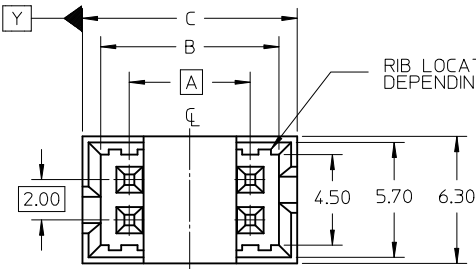
Mates With
[50394](#) Wire-to-Board Terminals. [51110](#) Wire-to-Board Crimp Housing. [87568](#) Wire-to-Board IDT Housings. [79107](#) Board-to-Board Top Entry Through Hole Receptacle. [79108](#) Board-to-Board FFC/FPC Top Entry Through Hole Receptacle. L

Termination Interface: Style	Surface Mount
Electrical	
Current - Maximum per Contact	2A
Voltage - Maximum	125V
Solder Process Data	
Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260
Material Info	
Reference - Drawing Numbers	
Product Specification	PS-87831-027
Sales Drawing	SD-87832-010

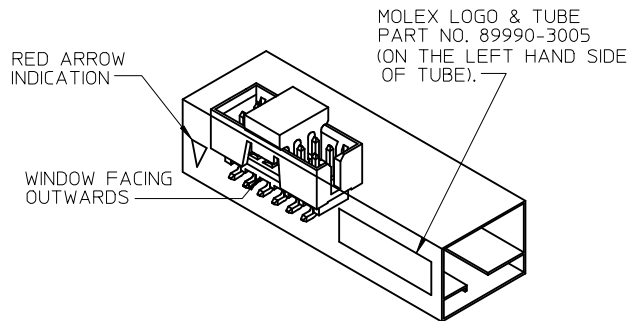
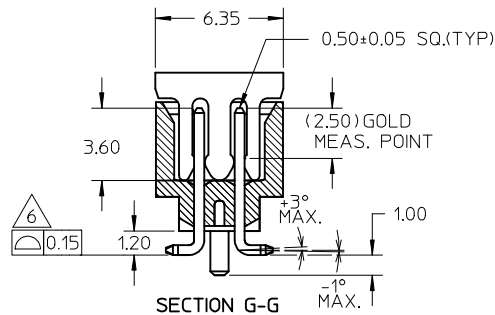
This document was generated on 05/25/2010

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PEG OPTION	P/N WITH CAP IN TAPE & REEL	P/N WITH CAP IN TUBE	P/N WITHOUT CAP IN TUBE	CKT SIZE	DIMENSION				
					A	B	C	D	P
NO	87832-0406	87832-0408	87832-0410	4	2.00	4.85	6.65	5.00	-
YES	87832-0606	87832-0608	87832-0610	6	4.00	6.85	8.65	7.00	2.00
YES	87832-0806	87832-0808	87832-0810	8	6.00	8.85	10.65	9.00	4.00
YES	87832-1006	87832-1008	87832-1010	10	8.00	10.85	12.65	11.00	6.00
YES	87832-1206	87832-1208	87832-1210	12	10.00	12.85	14.65	13.00	8.00



RECOMMENDED PCB PATTERN

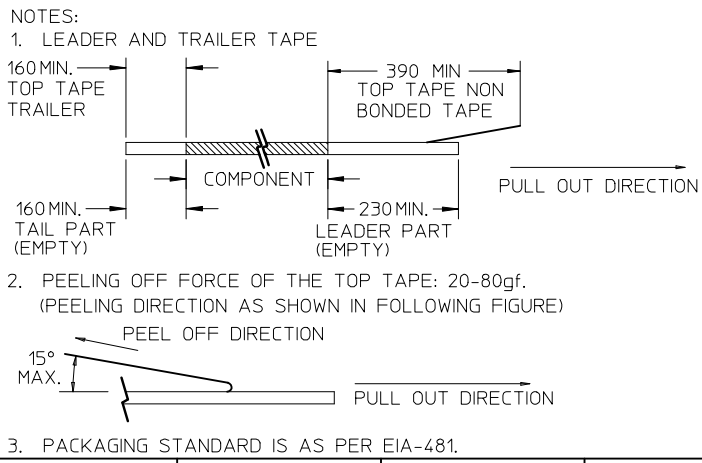
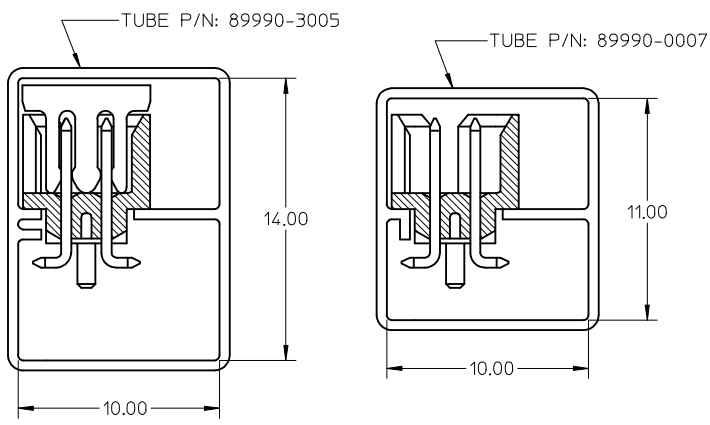
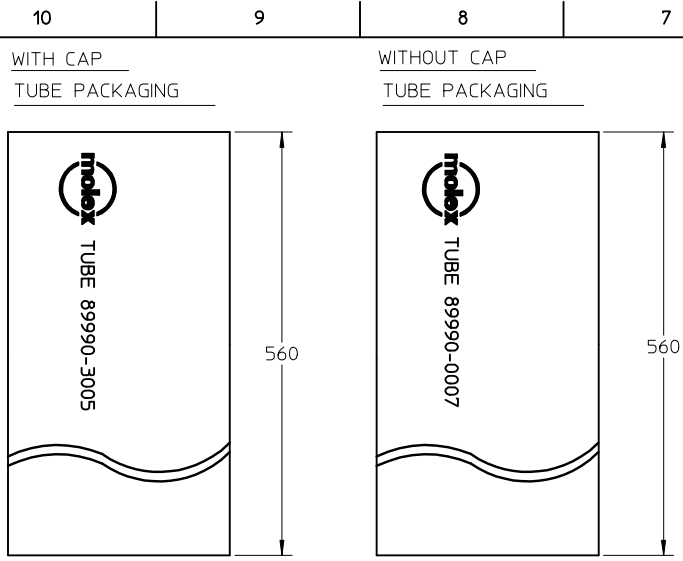


REF : ORIENTATION OF PART IN TUBE.
(FOR THE REFERENCE OF PART/TUBE ASSEMBLY.)

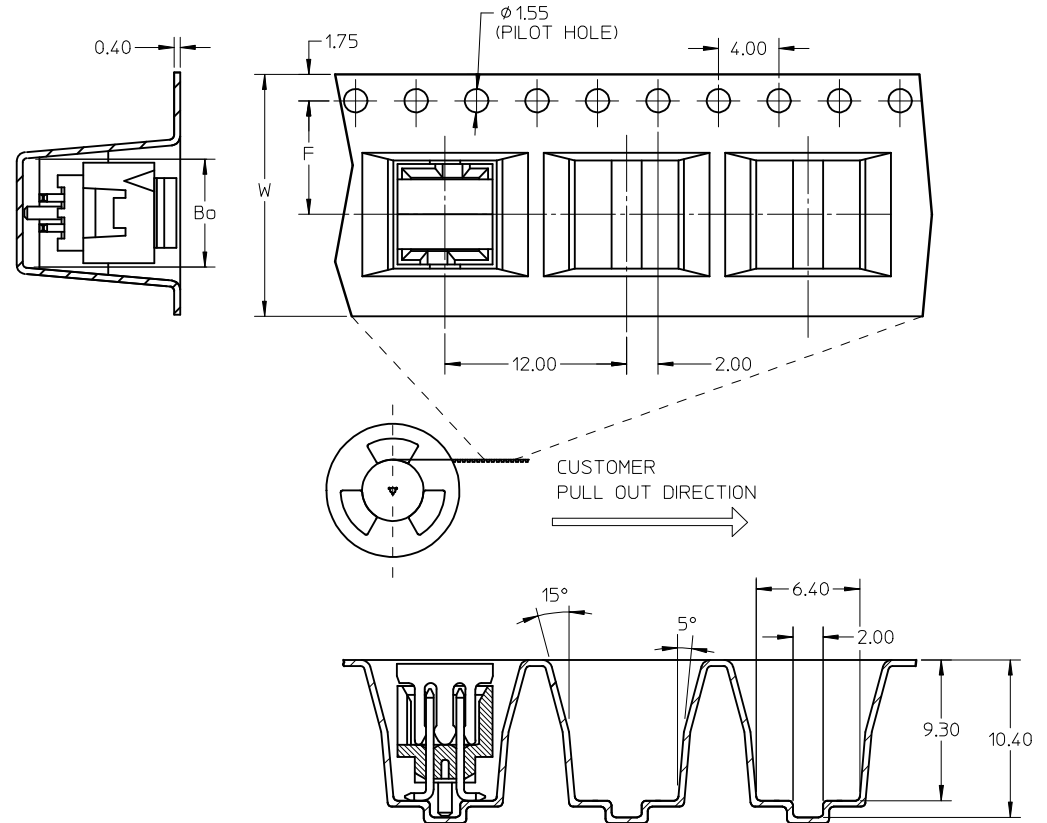
NOTES:

- FOR ILLUSTRATION PURPOSES, 8 CIRCUIT SIZE WAFER IS SHOWN.
- MATERIAL :
HOUSING & CAP : 30% G.F., NYLON 46, UL94V-0, COLOR BLACK.
PIN : 0.50MM SQ.PHOSPHOR BRONZE.
- PLATING :
0.38um/15uin GOLD IN CONTACT AREA AND 1.88um/75uin MIN.TIN IN SOLDER TAIL AREA OVER 1.27um/50uin MIN. NICKEL OVERALL.
- PIN PUSHOUT FORCE : 0.91 KG MIN. IN EITHER DIRECTION.
- PRODUCT SPECIFICATION PS-87831-027 APPLIES.
- COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A GAUGE SURFACE.
- BEND DEPRESSION ON SMT TAIL IS ACCEPTACLE SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF THE TAIL.
- CAP TO BE POSITION IN THE CENTER OF HEADER FOR PICK AND PLACE.
- CKT 4 & 6 HAS NO IDENTIFICATION TAG.
- THIS HEADER MATES WITH MOLEX:
a) CRIMP RECEPTACLE HOUSING, 51110 SERIES
WITH CRIMP TERMINAL, 50394 SERIES.
b) 2MM MILLIGRID DUAL ROW IDT, 87568 SERIES.
- PARTS TO BE PACKED IN MOISTURE BARRIER BAG WITH DESICCANT GEL.
- NO CENTRE POLARIZATION SLOT FOR CKT SIZE 4 & 6.

ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN:YMCHONG CHKD:SKANG APPR:MLONG A5	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
					mm	INCH	DRAWN BY ATSEE		DATE 2003/10/15		TITLE MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SMT, IN TUBE AND T&R MOLEX MOLEX INCORPORATED	
				4 PLACES	± ---	± ---	CHECKED BY		DATE			
				3 PLACES	± ---	± ---	KCLING		2003/11/07			
				2 PLACES	± 0.2	± ---	APPROVED BY		DATE			
				1 PLACE	± ---	± ---	SKTOH		2003/11/07			
				ANGULAR ± 3 °		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87832-010		1 OF 2		
						SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



EMBOSSED CARRIER TAPE 'A'



P/N WITH CAP IN T&R	CKT SIZE	F	Bo	So	W
87832-0406	04	7.50	7.15	-	16.00
87832-0606	06	11.50	9.15	-	24.00
87832-0806	08	11.50	11.05	-	24.00
87832-1006	10	11.50	13.05	-	24.00
87832-1206	12	14.20	15.15	28.40	32.00

ADD IN NOTES NO.12 EC NO: S2009-0943 DRWN:YMCCHONG CHKD:SKANG APPR:MLONG REV A5	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION					
		▽=0	4 PLACES	± ---	± ---	DRAWN BY ATSEE	DATE 2003/10/15	TITLE MGRID, SHROUDED HEADER W/PEGS/CAP/LOCK FEATURE SMT, IN TUBE AND T&R						
		▽=0	3 PLACES	± ---	± ---	CHECKED BY KCL ING	DATE 2003/11/07							
			2 PLACES	± 0.2	± ---	APPROVED BY SKTOH	DATE 2003/11/07	MOLEX INCORPORATED						
			1 PLACE	± ---	± ---									
		ANGULAR ± 3 °				MATERIAL NO.		DOCUMENT NO.		SHEET NO.				
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE TABLE		SD-87832-010		2 OF 2				
						SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							